APPENDIX "B"

PRESERVING A COMMUNITY

Historic Rehabilitation Standards and Guidelines

for

THE VILLAGE OF THOMPSONVILLE

Enfield, Connecticut

Mulligan House – 121 Pearl Street – ca. 1886

The Town of Enfield

Enfield Planning and Zoning Commission in

cooperation with the

Enfield Revitalization Strategy Committee

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INTRODUCTION

Thompsonville contains one of the largest collections of historic buildings in Connecticut. More than 800 examples of 19th and 20th century architecture still stand along her streets. The historic carpet mills and nearby residential streets are already listed on the National Register of Historic Places. Plans are underway to nominate the rest of village for this honorary designation.

The life experiences of many past generations are associated with these historic resources—in the houses where people lived and raised families, in the businesses they founded, and in the churches and schools they attended. Together they represent the collective cultural heritage of a village that played such an important role in Connecticut's industrial history.

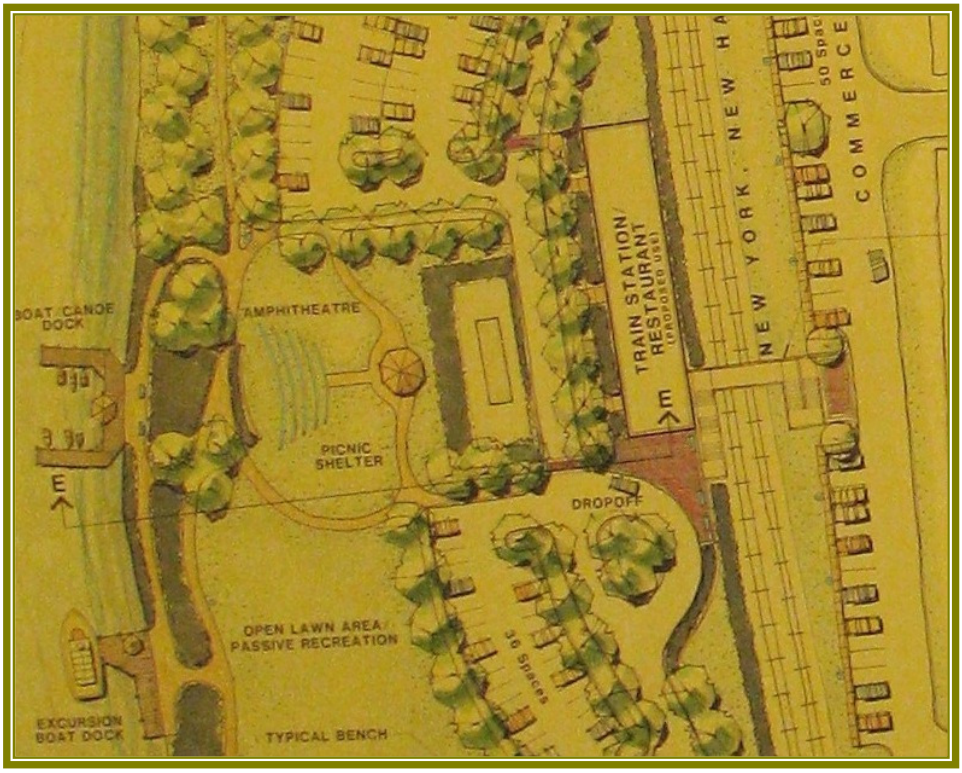
With the closing of the carpet mills, which began in the 1960s, the village went into decline. Like many communities created to serve one industry, when the mills went silent, the village lost its purpose and focus. Instead of a village where virtually everyone once worked at the mills, Thompsonville residents now commute to jobs in other towns and cites. Churches have relocated, schools have closed, and a number of stores were demolished. Some historic houses are gone, destroyed by neglect, fire, and most recently, even by a truck crash. Many more have lost much of their historic character because of insensitive renovations.

There is an alternative—a comprehensive historic rehabilitation program that will preserve historic cultural resources and improve the quality of community life. Appropriate rehabilitation procedures can upgrade the housing stock and provide more livable homes; new uses can be found for obsolete schools and churches; new businesses can flourish in renovated storefronts. As you look around, you will see that this revitalization process has already begun. The conversion of the historic carpet mills to "Bigelow Commons," now an apartment complex, was a major step.

Bigelow Commons

Fresh Water Pond, which once provided waterpower to run the mills, has been reclaimed as the centerpiece of the historic village landscape. A public boat launch at a former historic ferry landing once again reconnects the village to the Connecticut River.
Future plans include restoring passenger service on the historic railroad nearby.

Train Station & Riverside Development from the 1992
Thompsonville Revitalization Plan ▼



A number of homeowners and landlords already take pride in their well-maintained properties, but much more can be done. The quality of the environment in your neighborhood, or on your street, may ultimately depend on what you, the property owner, can do to improve and maintain your historic building. Whether you are a homeowner, landlord, developer, architect, or contractor, this historic rehabilitation handbook will show you the way.

In Part I you can renew your appreciation of Thompsonville's cultural heritage and learn more about its architecture. In Part II the Standards introduce you to the preservation principles that govern historic rehabilitation projects in Thompsonville. The Guidelines interpret and apply these Standards and provide appropriate solutions to most local historic building problems and. maintenance issues. While the majority of this instructive document focuses on residential properties, the largest group of historic resources in Thompsonville, the Guidelines is meant to be used with all types of historic structures, including existing and in-fill commercial and mixed-use projects. Wherever possible, several practical alternatives are presented so that you can choose what is best for your building and your pocketbook. Fixing up a historic building can be a major investment (constructing a new structure architecturally compatible to its surroundings, no less so). Although no direct grants are available, rehabilitations of qualified properties that are performed according to the Standards and Guidelines may be eligible for tax incentives from local, state, or federal agencies. Consult "Sources of Aid" in the appendix for information about these programs.

THE THOMPSONVILLE STORY

Did you know that the Town of Enfield was once part of Massachusetts? Or that cattle and sheep once grazed where Thompsonville stands today? Or why we call the village Thompsonville? The answers to these questions and more are found in the story of Thompsonville, an industrial village where literally thousands of immigrant families lived and worked for more than a century.

The story really began in the 1630s when a vast territory in the Connecticut River Valley was awarded to William Pynchon, the fur trader who founded Springfield, Massachusetts. Pynchon's land holdings, on both sides of the Connecticut in Massachusetts, ran all the way down the east side of the river through present-day Suffield and Enfield. Settlement at "Fresh Water Plantation," as Enfield was first called was delayed until 1680. At that time the first settlers were granted land for houses and farms along the Great Highway (now Enfield Street) and awarded grazing rights in the meadows along the Connecticut River—much, much later, these meadows were the site of the industrial community we know as Thompsonville.

We must fast forward to 1800s, when industry first began in Thompsonville. The village is named for Orrin Thompson, who established a carpet factory on Fresh Water Brook in 1828. Thompson, one of the many ambitious Yankee industrial entrepreneurs in this period, had a good head for business. Born on a farm in Suffield in 1788, Thompson became a commission agent and partner in a wholesale carpet import business in New York City. At the time, all carpeting was imported from England and Scotland, the international center of the textile industry, and subject to high import tariffs. Recognizing that there was more money to be made in carpets manufactured right here in America, Thompson formed a stock company to finance his Thompsonville venture. In the next 30 years he laid the foundation for an industry that sustained the village of Thompsonville for more than a century.

The textile firm in Scotland that supplied much of the original capital also sent skilled Scottish weavers to Thompsonville. When they arrived in December 1828, the mill was not ready and, except for temporary quarters in boatmen's taverns near the river, there was no place for them to live. Although these highly skilled workers were not pleased to learn that Thompson expected them to work as ordinary laborers, they soon set about building their own cottages and managed to complete the work on a 110-foot stone dam and a large wood-framed mill on Fresh Water Brook by the summer of 1829.

The newly established Thompsonville Carpet Manufacturing Company was equipped with water-powered spinning and carding machinery but the carpeting was woven on handlooms. The company used the Connecticut River to ship goods to market until the 1840s, when the Hartford Springfield Railroad was laid out along the river bank. With direct access to this cheaper and more reliable transportation, Thompson increased production. In 1847, after purchasing the user rights to the newly invented Bigelow power loom, Thompson mortgaged his company to buy 230 of these new machines. They were installed in the original factory and a new brick spinning mill that was erected nearby. Power looms also were added at the Tariff Manufacturing

Company, a failed carpet business in Simsbury that Thompson had purchased in 1841. Altogether, the new machinery cost $350,000 and a similar amount was spent on wool and other raw materials. Evidently such large capital investments reduced profits as well as shareholder earnings, for his partners in Scotland and New York and local stockholders pressured Thompson to buy their shares. Although costly, the buyout left him in sole control of the company. He also took over the New York sales agency, which was run by his son, Henry G. Thompson.

By 1850, although Thompsonville Carpet Company employed 1650 workers and was producing 250,000 yards of carpet annually, Thompson was deeply in debt and on the verge of bankruptcy. Timely infusions of Hartford capital came to the rescue. Thompson was forced to give up control of the business, but was allowed to stay on as mill superintendent until 1861. The renamed Hartford Carpet Company continued and prospered under its new management with profits approaching one million dollars in 1875. By the 1890s 1800 men, women, and children worked at the mills.

Largely due to a series of mergers with competitors, most notably with Bigelow Carpet in 1914, a Massachusetts company, and Sanford Carpet of New York in 1929, the Thompsonville firm became the largest carpet producer in the country. The village, then nationally renowned as "Carpet City," contained the largest carpet manufacturing plant in all of New England. Employing nearly 3000 workers, the modern brick facility contained ten major mill buildings, some exceeding 50,000 square feet, all equipped with the latest textile machinery.

The architectural legacy of the carpet industry extended well beyond the confines of the mill yard. From the very beginning the company supplied housing for its workers and continued that custom into the 1920s. Among the first were the Greek Revival tenements at the north end of Church and Pleasant streets. More tenements were built to house workers transferred from Tariffville when the factory there burned down in 1867. When the carpet business was at its height in the early twentieth century, Bigelow and Hartford avenues were laid out on former farmland and lined with large, multi-family, Colonial Revival-style houses. Although all told, the company invested in nearly 150 multifamily rental properties, only a third of the workforce could be accommodated.

The demand for more worker housing was met by the private sector. A new grid of streets was laid out to the south and west by 1875. An evolving "downtown" business district on Main Street (no longer extant) included a hotel at the corner of Pleasant Street and provided residents with most of the necessary goods ands services. By 1900 Thompsonville had taken on a decidedly urban architectural character. Entire blocks of multi-family rental properties were constructed by real estate developers. Many of the duplexes and double-deckers were owner-occupied. Most of the villagers were first- or second-generation immigrants who came here from Europe to find jobs in the mills. The churches they built, several on land donated by the carpet company, made major architectural contributions to the streetscapes. In addition to new

public and parochial schools, other institutional growth included a Beaux-Arts style library erected at the corner of Pearl and Franklin streets in 1914, one of many public libraries funded by Andrew Carnegie.

Pearl Street Library - ca. 1914

Architectural Style in Thompsonville

(Architectural terms are defined in the Architectural Glossary in the Appendix)

The characteristic features of the principal styles and house types found in Thompsonville from about 1840 to 1950 are described below. Only a few historic houses in the village display all the architectural features associated with any particular style. These exceptions, particularly the larger single-family dwellings that stand today on Enfield and lower Pearl streets, may have served as models for local builders, who often constructed simplified vernacular versions of these principal styles. This was particularly true for the multi-family workers' houses of the late nineteenth and early twentieth centuries, where stylistic detail is limited. You also may find that your house combines elements of several contemporary styles. It also was a common practice to update early nineteenth-century houses with new, more stylish porches, especially in the Colonial Revival period.

Once you have discovered what kind of house you have from the styles described and illustrated below you can begin to plan the renovation of your home. You can consider repairing or replacing the architectural features that make your house unique. In the long run, choosing the right doorway or windows, or even the right colors to paint your house will make it more attractive and increase its value.

Every historic building in Thompsonville is a product of its time**.** Changes in style and form and even the level of architectural detail were made possible by improvements in building technology. The simple timber-framed houses of the colonial period, held together by intricate joints and wooden pegs, often called post-and-beam construction, were fashioned with hand tools. Only shingles and clapboards were sawn in water-powered mills. Glass was expensive because it was imported from England, the main reason why early colonial windows have such small panes. In Thompsonville, although no colonial houses have survived, similar gabled-roofed forms with heavy timber frames persisted well into the nineteenth century.

The more elaborate Victorian styles of the later nineteenth century were products of the Industrial Revolution. For the first time, standardized lumber was mass produced in steam-powered sawmills and a new type of construction called balloon framing was introduced. Similar to the standard stud-wall construction in use today, balloon framing allowed carpenters to build more complex house forms, featuring projecting bays, porches, and even towers.

The Centennial Exposition held in Philadelphia in 1876 is credited with sparking the popularity of the ornate detailing so characteristic of late Victorian architecture. Machine-made architectural details allowed builders to elaborate even simple house forms with an amazing variety of applied detail. By the twentieth century, Americans began to reject the architectural excesses of the Victorian era and revived the relative simplicity of the colonial period. Even though the popular Colonial Revival styles utilized earlier colonial forms, houses in this period often displayed columns and other machine-made classical details.

Greek Revival Style

Exceptional vernacular Greek Revival with typical Enfield 'el' wing – Enfield St. - ca. 1850

The Greek Revival has been called the first true American architectural style. Reflecting the admiration that our new country had for the democratic ideals of ancient Greece, churches and houses were based on the form of a Greek temple. The gable end of the house, representing the temple front, faces the street, usually highlighted by a pediment across the gable peak. Narrow attic windows may be found in the wide frieze board that often runs around the house under the eaves and the pediment. Corner pilasters or boards represented the columns of the temple.

22 Prospect St., 1st house of Henry Thompson

◄ Small entrance porches are supported by round columns, detailed in one of the Greek orders.

Two other typical Enfield Greek Revival designs, one in clapboard, one in brick– Both ca. 1850

Carpet Company Superintendent's House – 12 Pleasant Street - ca. 1840

One of the more high-style examples, the mill superintendent's house on Pleasant Street, displays a two-story, colonnaded façade porch. Clapboards were usually used for siding, although occasionally flush boards were selected to give the appearance of the smooth stone walls of a temple. Houses and churches of this style were always painted white or in a very light color to look like marble.

Multi-family (or tenement) Greek Revival House– Pleasant Street - ca. 1860

A number of the multi-family workers' houses built by the carpet company along streets near the mills illustrate the more common local version of this style. These tenements, as rental properties were once known, were built of brick or wood and some have slate roofs. Plain boards trim the windows and outline the sills and corners of the wood-framed examples. Style is often expressed just by Greek Revival doorways, which display wide pilasters and high entablatures, as shown here in this Pleasant Street example. Double-hung windows associated with this style usually have six panes in each sash and narrow muntins. Greek Revival cottages often have narrow three-pane attic windows under the eaves.

114 North Street ▲

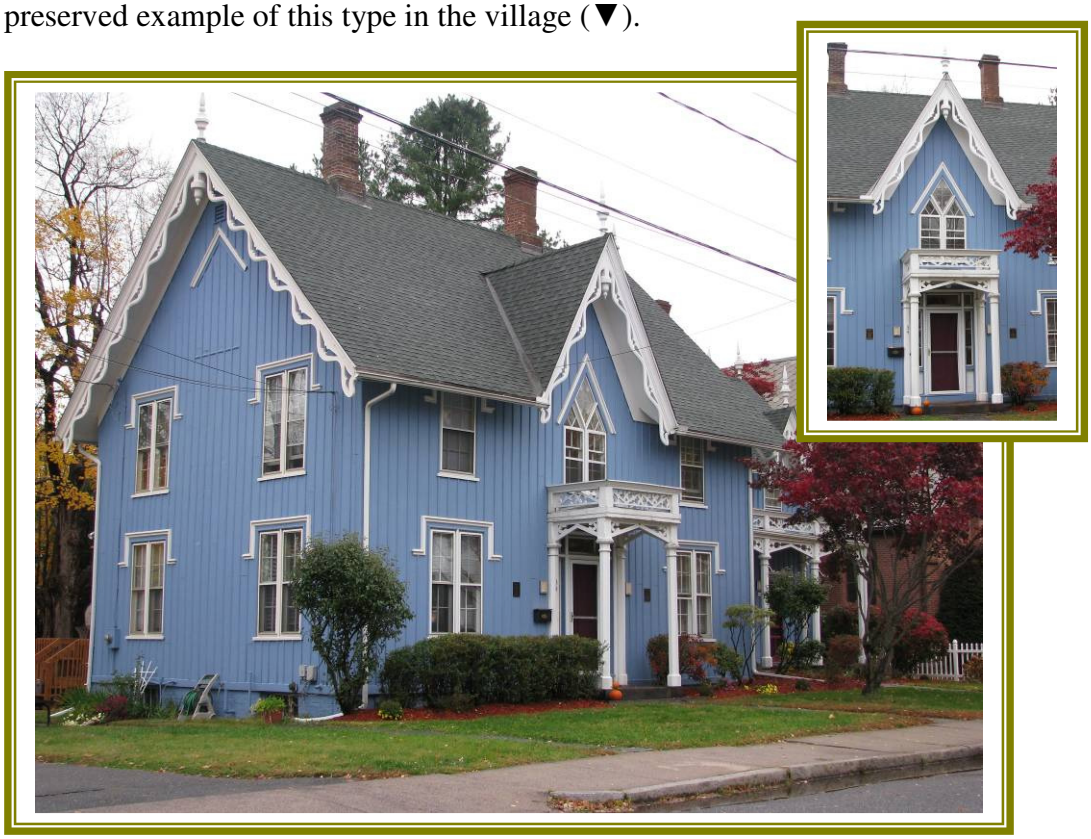
Gothic Revival Style

A popular style for both houses and churches, the Gothic Revival is characterized by steeply pitched roofs and pointed-arch windows.
In Thompsonville, St. Andrew's Episcopal Church on Prospect Street (above)

and the former United Methodist church (above) on High Street exemplify this formal style.

One of the Carpenter Gothic cottages on Cottage Green, ca. 1848 and possibly designed by Alexander Jackson Davis

As interpreted by local builders, the so-called Carpenter Gothic style, may include vertical board-and-batten siding and decorative bargeboards or trusses in the gable peaks. A small group of Carpenter Gothic cottages were built around Cottage Green for the employees of a hosiery factory. Henry Thompson, the factory owner, lived nearby on Prospect Street in the best preserved example of this type in the village (▼).



Henry Thompson's second house in Thompsonville at 34 Prospect Street, designed by Alexander Jackson Davis in 1848, constructed ca. 1850. His first house was the heavily modified Greek Revival at 22 Prospect Street.

Italianate Style

The Italianate is often called the "bracketed" style for the carved or sawn wooden brackets used to support and decorate wide roof overhangs. Smaller brackets may support the sills or caps of windows, including the projecting bay windows that are typical of this style.

◄ 33 Windsor Street – ca. 1880

A characteristic Italianate entrance porch with chamfered and bracketed posts highlights the brick, cube-form are found in one example Italianate on Windsor Street. Its segmental-arched windows are detailed with hood molds on the side elevations and brick diaper work on the façade.

2-story porches and full height bay windows at 158 Pearl Street – ca. 1881

Two-story porches, as well as full-height bay windows are featured on two similar Italianates on Pearl Street.

More modest local examples, which usually have an "L" plan with intersecting gabled roofs, have brackets at the eaves and/or at the top of chamfered or turned porch posts. One- or two-story bay windows are common features.

A door hood supported by scrolled brackets with drops and an exceptional side porch with a pierced balustrade and curved brackets distinguish a circa 1880 Italianate on Russell Street

Ca. 1880 Italianate – Russell Street

Round-arched gable windows, another style identifier, often paired on the façade, are found on the neighboring Vital Courmier house (ca. 1878), which also has two arched glass lights in the front door, as well as delicate eave brackets and a fully detailed front porch.

A touch of Gothic Revival is found in the pointed gable windows that highlight the gable peaks of neighboring houses on New King Street. Two-over-two, double-hung sash is typical for this and other later nineteenth-century styles.

A prime example of commercial Italianate design in Thompsonville, this is the last remaining representation of cast iron column façade work in Enfield.
Ca. 1880

Second Empire or Mansard Style

Second Empire is a formal style, readily identified by a double-pitched mansard roof, usually covered with slate shingles. The steeper lower slope of the roof is tall enough to accommodate full-height, pedimented dormers. Roof brackets are common features. Although briefly popular in cities, only a few were ever built in Thompsonville.

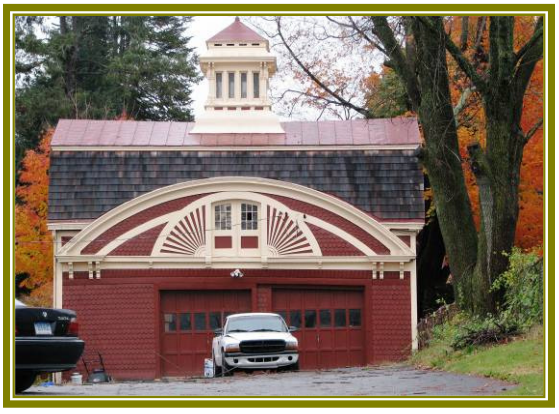
The David Brainerd House (ca. 1880) on Pearl Street (a.k.a. the Masonic Lodge) is one of only two examples of this style in the village. The 2nd is on Alden Avenue (below), also ca. 1880.

Queen Anne Style

Most of the late Victorian houses in Thompsonville were influenced to some degree by the Queen Anne style, which was derived from late 16th century English architecture. In contrast to the box-like forms of earlier styles, larger more stylish Queen Annes are characterized by a variety of forms, towers or turrets, wings, and bays, often joined together by a wraparound veranda. Although the veranda has been enclosed, the Robert Hilditch house ◄ (now an apartment house) on Pearl Street exemplifies this newer asymmetrical massing.

Queen Annes often display the Victorian penchant for embellished surfaces, as shown by the 1886 William Mulligan House next door (left).

Elaborated with decorative brickwork with white terra cotta insets, this exceptional Queen Anne is complemented by its fully detailed, matching carriage house (right).



Wood-frame houses often display a variety of sidings and patterned shingles set off by trim boards. The Shingle style, a version of Queen Anne in which wood shingles cover the entire wall surface and trim boards are omitted, is not found in the village. In the related Stick style, however, trim boards not only outline the shape of the house, they mimic the underlying structural framework. This is exemplified by the Benjamin Lord House, ▲, another Queen Anne on Pearl Street, which also features decorative brickwork on the end chimneys. Windows and doors display the multicolored leaded glass transoms so characteristic of the style.

Several period styles are combined in the Shubael Parsons house next door. In addition to Stick-style trim work, it also is embellished with bold Eastlake-style detailing on the entrance porches and in the gable peaks.

Many Thompsonville expressions of this style, sometimes called Princess Anne's because of their smaller scale, usually have a gable-to-street orientation and a modified cross-gable plan. As originally constructed, these vernacular Queen Anne's were sheathed with clapboard siding and shingling delineated by trim boards. Some display rows of shaped shingles in the gables, and wide finish boards along the rakes. Open one- and two-story porches, which enhance many local multifamily examples including double-deckers, display all kinds millwork, such as turned posts and sawn brackets.

The Guido Mazzini House on Prospect Street ▲, one of the best preserved multifamily examples, has retained many original Stick-style features, including fish-scale shingling. It also has matching side porches with scrolled and pieced designs, decorative gable trusses, and exposed rafter tails.

The bay windows of the Italianate style now display decorative brackets at the cut-away corners, as shown here on the Julius Smith house on Garden Street. ►

Another common local style indicator is a small window bordered by small panes of colored glass, often used to light a stair well. Double-hung windows may have either two-over-two or one-over-one sash.

Colonial Revival Style

Like the Queen Anne, the Colonial Revival is an umbrella style, encompassing a range of types, all loosely based on colonial precedents. Among them are the Cape, a one-and-one-half story house, and the larger two-story "Colonial," which may have a gable or gambrel roof with cornice returns on the façade. Colonial Revival porches, which usually have single or double columns, may feature a roof pediment over the entrance. On double-deckers built in this period, the second story porches are set into the porch roofs below and typically feature a skirt instead of an open balustrade.

Other stylistic influences include the Queen Anne and the more formal Neo-Classical Revival (see below), which in combination with the Colonial Revival, is often called the Free Classic style. Often derived from Georgian architecture, they have a symmetrically balanced façade and a hip or gable roof with dormers. Architectural details found on these more formal designs may include a doorway framed by pilasters and a second-story Palladian (three-part) window. Others have wooden or stone quoins instead of corner boards. On some of the brick buildings, limestone is used for the quoin blocks, the water table, and other architectural details.

A simplified version of this basic design is found in the multi-family Colonial Revivals on Hartford Avenue and Bigelow Avenue. Built by the carpet company just prior to World War I, they have alternating gambrel and gable roofs to add variety to the streetscapes. On side elevations, pedimented wall dormers incorporate first-floor bay windows with Queen Anne cut-away corners.

◄ Hartford Ave.
Colonial Revival

Bigelow Avenue
Colonial Revival ▼

Four-Square

The Four-Square, one of the more popular Colonial Revival sub-types in Thompsonville, is nearly square in plan, and always has a hipped roof.

▲ Franklin Street ►

A high style example on Enfield Street might typically incorporate Colonial Revival elements, such as the portico with freestanding and engaged columns and diamond pane windows. The sun porch is also typical of the Colonial Revival period. An exceptional collection of Four-Squares on Franklin Street all display the gabled roof dormers associated with this style.

An unusual double-decker variant of the Four Square, which has docked facade gables, was introduced on upper Windsor Street. in the 1920s. ►

Neo-Classical Revival Style

Higgins School

In Thompsonville the Neo-Classical Revival style is generally reserved for schools, apartment buildings, and large commercial blocks, all built of brick in the early 20th century. Like the architecture of the early 1800s, the first classical revival period, this style relies on the detailing and massing of ancient Greek and Roman architecture. Simple expressions of this style are found in the wood and brick cornices on the Thompson Court apartment buildings,

4 Thompson Ct. ▲

10 Thompson Ct. ▲

◄ - in the cornice modillions of the Higgins School on North Main Street,

- and in the projecting, three-part pavilion of the Alcorn School on Enfield Street. ►

In commercial buildings, roof and storefront cornices are elaborated with a modillions and the façade is framed by quoining. One of the most fully detailed and well preserved examples of this commercial style is the George Lehman Block on Pearl Street shown at left. The round arch of the pediment in the roof cornice is repeated in the entranceway, which is flanked by Doric order columns.

Bungalow

The Bungalow style, which was derived from the East Indian "bangla," features broad facade dormers and wide roof overhangs. Characteristically, the main roof sweeps down over an integral façade porch, which may be supported by heavy battered (slanted) posts, or Colonial Revival-style columns. Also influenced by the Arts and Crafts movement of this period, bungalows may feature the use of natural materials, such as wood shingles or cobblestones, and/or exposed rafter tails and eave brackets.

One of the more stylish examples ▲ was built by William J. Hines on Enfield Street, in which shed dormer windows are set down into the slope of the façade porch roof, which is supported by short, massive columns.

In some Thompsonville bungalows ▲, the porch has a separate shed roof.

PART II

STANDARDS AND GUIDELINES FOR THOMPSONVILLE

These Standards and Guidelines were developed to establish a preservation policy for Thompsonville. Adapted from the National Park Service Standards for Historic Rehabilitation, they are designed to restore and preserve the historic architectural character of the community. They address all types of exterior historic rehabilitation projects, including renovations and new additions to existing historic structures, and new construction in historic neighborhoods.

The Thompsonville Standards on the following pages incorporate the basic preservation principles that frame the preservation policy. The Guidelines apply these principles to the typical preservation problems identified during a comprehensive year-long survey of Thompsonville. While they focus on common local building conditions and maintenance issues and provide appropriate solutions, the Guidelines also address the long-term impact of modern artificial siding and other preservation-related concerns, such as how to deal with energy conservation and water damage in historic buildings.

More detailed information on all these topics is readily available online from the National Park Service (NPS) and the Association for Preservation Technology (APT). See internet addresses in the bibliography. Copies of the NPS preservation briefs and other useful information, including the hiring of contractors, or safety procedures for lead and asbestos removal, are available at the Enfield Planning Department in the Town Hall, the Main Library on Middle Road, and the Pearl Street Library in Thompsonville, courtesy of the Enfield Historic District Commission. In addition, Historic District Commission staff provide free consultations on individual projects.

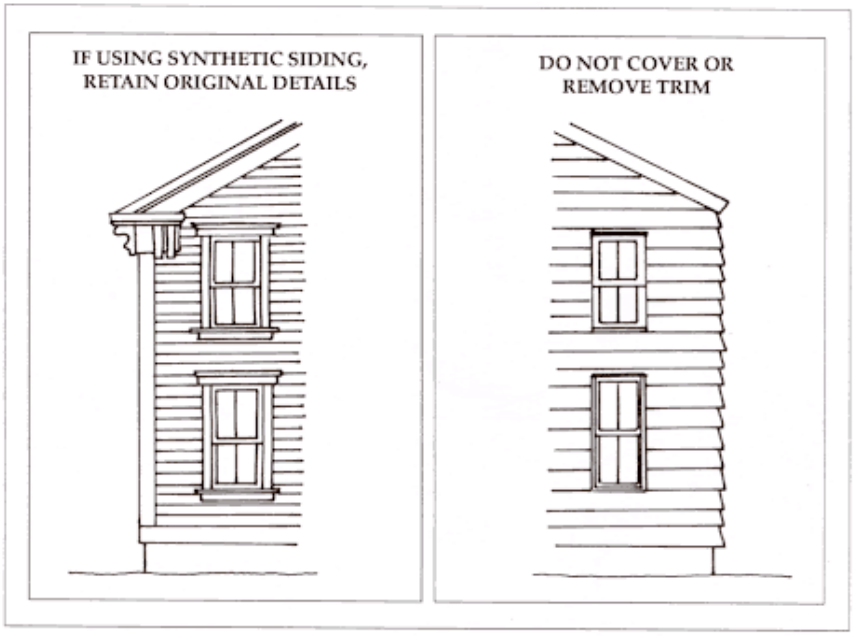
Historic Rehabilitation Standards

1. **Historic architectural character will be preserved by retaining, repairing, and/or refinishing all distinctive features, materials, and finishes, including. but not limited to siding, architectural details, porches, windows, and doors.**

2. **Replace only severely deteriorated historic fabric. New architectural elements will match the original design and materials, or if missing, be based upon appropriate examples from a similar style or period or be documented by historic photographs.**

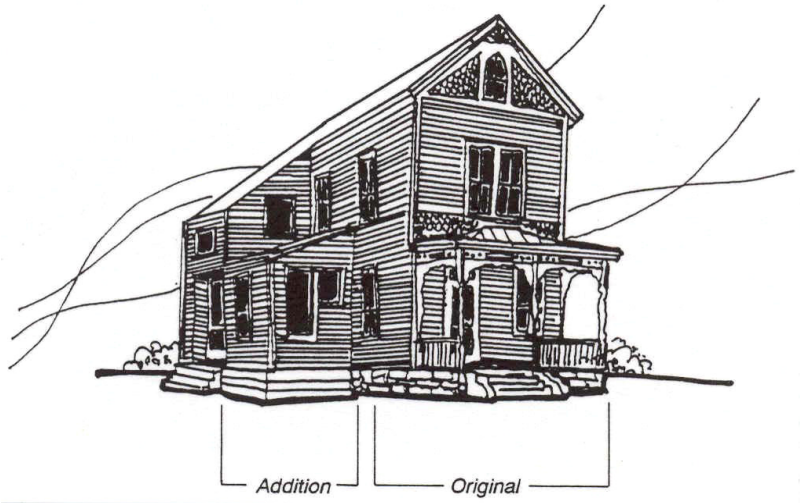
Wooden ornamental trim such as this can be duplicated with a jigsaw or purchased from reproduction catalogs

3. **The use of artificial replacement siding is not recommended because of its potential negative impact upon structural and architectural integrity. To mitigate the loss of architectural integrity, only installation methods that protect and preserve existing historic features and architectural details will be permitted. If there is no alternative but to use synthetic siding, the original details should be retained.**



4. **The use of pressure-treated, construction grade lumber for exterior finish work on historic porches and other visible exterior features is not permitted.**
5. **The use of physical treatments or chemical products that damage historic materials is not permitted.**
6. **Rehabilitation plans will include the repair of historic materials and features damaged by water infiltration and moisture condensation.**
7. **Retrofitting for energy conservation will be limited to procedures and products that minimize damage to historic fabric.**
8. **New additions and exterior alterations will be compatible with the scale and proportions of the existing building and generally confined to less visible rear elevations.**

APPROPRIATE & COMPATIBLE ADDITION:
- ♦ Similar Roof Shapes
- ♦ Same Materials
- ♦ Addition Subordinate to Original



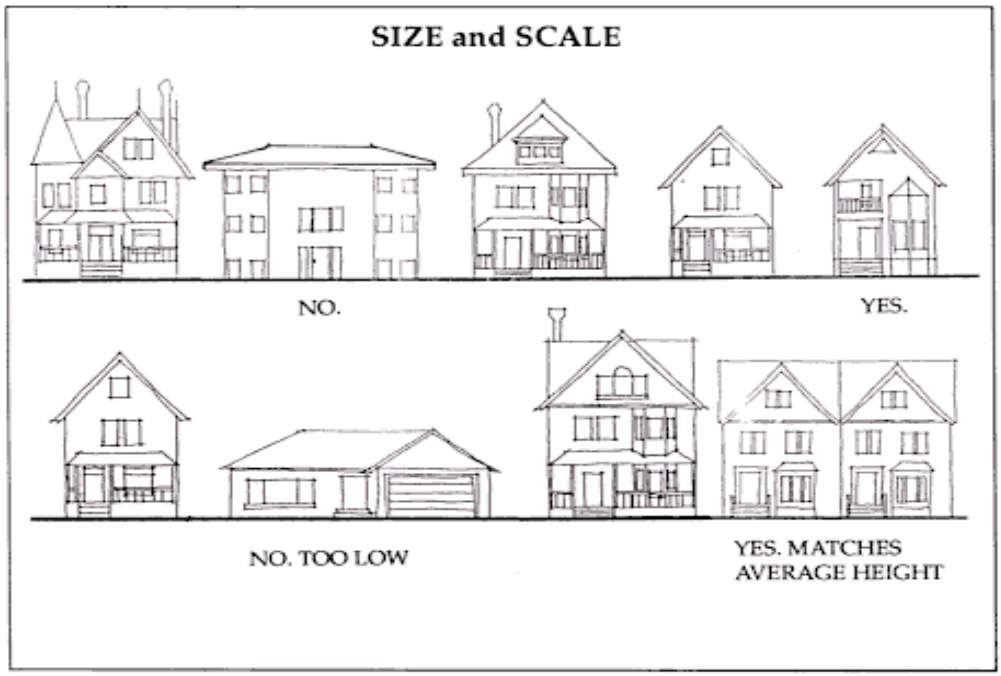
INCOMPATIBLE ADDITION:
- ♦ Different Roof Shapes
- ♦ Different Windows
- ♦ Different Materials
- ♦ Enclosed Front Porch

9. **New infill construction on vacant lots will conform to the typical scale, proportion, massing, and materials of the historic streetscape**

and reflect the functional character (residential or commercial) of the historic neighborhood.

An appropriate infill house (center) on a traditional street

An inappropriate "tuck under" infill house (center) on a traditional street



10. Landscape features, including fencing, will conform to the prevailing residential and/or commercial character of the historic neighborhood.

Historic Rehabilitation Guidelines

HISTORIC AND MODERN SIDINGS

Guidelines: Every effort should be made to repair, refinish, and maintain wood sidings and brick masonry, important historic materials that are the basis of most architectural styles in Thompsonville. The application of artificial siding is strongly discouraged. A major factor in the loss of historic character in Thompsonville, artificial siding also accelerates moisture and decay problems that lead to structural damage.

WOOD SIDING

Most wood-framed homes in Thompsonville were originally sheathed with wood clapboards or shingles. These durable and readily available materials were preferred throughout the historic period. Tests have shown that unless decay factors are present, the strength and stiffness of wood remains substantially unchanged for at least 100 years. You have only to look around Thompsonville to find houses at least this old that are still standing, even if they were not well maintained.

COMMON PROBLEMS: Missing or damaged siding, deteriorated paint surfaces, or walls already covered with asphalt or asbestos shingles. Dirt or discoloration from mildew or air- and waterborne pollutants. Moss, algae, and other organic growth and/or excessive flaking or peeling paint, especially on the lower half of the wall.

SOLUTIONS: If only a small number of shingles or clapboards are cracked or damaged, repair or replace them. If most of the wood is still in good shape, replace just the damaged areas. Rarely does all the siding need to be replaced. .

Mildly deteriorated paint surfaces and repaired sections will need painting. New paint bonds better to clean, dry, and dull surfaces, so good surface preparation is a must. It includes scraping and sanding of the deteriorated areas, and a complete light sanding to dull the surrounding paint surface, followed by a thorough cleaning. Since old paint may contain lead, safety precautions should include wet sanding, the use of goggles and masks, and the correct disposal methods. For more information on the safe handling of lead-based paint see Sources in the Appendix.

Peeling, the most common type of paint failure, is usually a sign that earlier coatings did not adhere or bond, which may be due to moisture in the walls. Mildew and organic growth are also signs of wet walls and/or poor air circulation. Look for ways to deal with these problems before you paint in the Guidelines for Controlling Moisture Problems (page 43) and Historic Landscaping (page 48).

Sandblasting to remove paint is a big mistake. Highly destructive, this method grinds away the softer wood fibers and leaves behind striated, porous surfaces.

If the paint surface is generally deteriorated, with extensive "alligatoring" (cracking), a sure sign of too many layers of paint, the entire building may need repainting. All the old paint should be removed down to bare wood. Chemical paint removers can do the job, but heat guns and heat plates, followed by hand-scraping, are the recommended methods. Because of potential fire danger, blow torches are no longer used. Since lead or other hazardous materials may be present, complete paint removal is not a project for the homeowner. Testing for lead is always recommended prior to removal of old paint and is required for projects that utilize public funds. Please see enclosed guide booklet for proper handling of Lead Based Paint.

Some of the ways to remove paint are highly destructive and should never be used. Sandblasting, the worst method, grinds away softer wood fibers and leaves behind striated, porous surfaces. Power washing, the method often preferred by painting contractors, can cause similar damage if the pressure is too high and/or the proper distance is not maintained between the nozzle tip and the building. Excessive pressure is particularly hard on architectural details, often destroying the original shape and form. The safest approach is to use the lowest possible pressure that will do the job. And always have your contractor demonstrate power washing or other paint removal methods on a small test area before proceeding. Since the building must dry out before any paint is applied, be sure that your contractor is equipped with meters to measure moisture levels **(<14%).**

POWER WASHING: CAUTION!

Water pressure levels must remain below any damage threshold (< 100 psi) or the point that soft fibers would be damaged or removed, which ever occurs first –do a test patch in an inconspicuous location! No abrasive materials should be added to the water mixture.

As power washing drives moisture into cracks and crevices, as well as wood fiber itself, each portion of each façade must be tested for moisture content. Before painting may begin, the moisture content must be 14% or less. Depending on weather conditions and humidity, this may mean up to three days between cleaning and beginning to prime and paint.

An experienced contractor that has been in business for a long time is your best bet. In addition to checking references, take a look at paint jobs the company did five or more years ago and see how well they have held up. If he can't or won't provide addresses of former jobs, choose someone else.

Maintenance = Preservation: Annual touch-up painting and cleaning are good maintenance practices that can extend the effective life of a new paint job.

A maintenance program is a useful tool; inspect your building's exterior, including any significant architectural detailing for condition and potential failure. This will identify any repairs needed immediately and also help plan a future schedule for those that can have maintenance postponed. (See appendix for sample inspection and maintenance schedule formats).

Historic Paint Colors

Choosing the right colors to paint a historic house is a personal decision. There are no hard and fast guidelines, only recommendations. Consider historic color schemes, which are always appropriate. As a general rule, white and lighter colors were popular between 1800 and 1850. In the early Victorian period, roughly 1850-1870, houses were painted with natural earth tones, such as light tan, gold and green, with a darker color for the trim. In the later Victorian period, deeper intense colors were used on the body of the house and several contrasting colors were used to accent architectural details. White again became popular after 1900 in the Colonial Revival period. For more information, consult historic color charts put out by paint companies.

MASONRY

Brick is the best maintenance bargain. It will have an attractive, "good as new" appearance that will last for decades with fewer and less expensive repairs. Although there are fewer brick buildings in Thompsonville, many wood-frame houses have brick foundations, which have similar problems.

COMMON PROBLEMS: Crumbling mortar, broken brick, and settling cracks in the masonry. As was the case with wood framed buildings, there may be dirt build-up and/or staining from air- and waterborne pollutants, or organic material growing near the base of walls.

SOLUTIONS: Cracks can be filled, brick replaced, and crumbling mortar re-pointed. Note: Unless the building appears watertight, complete all masonry repairs and re-pointing **before** cleaning.

New mortar should match the color and composition of the original. Always match the width, shape, texture, and depth of the original joints. Old mortar should be raked out to at least ¾".before proceeding. The color of many 19th-century mortars came from the sand in the mix, but powdered dyes are used today. Avoid re-pointing with standard bagged mortar mix, which is usually too light in color. Not only will the re-pointed area stand out like a sore thumb, modern mortar is often too hard and may cause the softer historic brick to break off, or spall at the edges.

Match replacement brick as closely as possible to the original; reset with new mortar and re-point as described above. If several bricks are broken in one area, or if a large section of wall section has disintegrated, often the case in brick foundations or steps, consider replacing the entire section. Remove all deteriorated brick and mortar back to sound masonry. Clean historic brick for reuse. Lay up new masonry courses (adding new brick as needed) in the original bond pattern, and re-point as described.

Standard cement mortar mix should never be used for re-pointing because it damages historic brick and brownstone.

If your brick house is already painted, a relatively common historic treatment, consider repainting. Do not attempt to remove old paint from brick or brownstone walls. Cleaning methods strong enough to remove paint damage these materials. Sandblasting is particularly destructive as it removes the hard outer surface and exposes the more porous layers underneath, which then deteriorate rapidly. When paint is removed from brownstone, even by hand scraping, special consolidants must be applied to seal the surface and prevent water penetration.

Repoint and repair masonry before power-washing to avoid water penetration inside the walls.

These two examples show the importance of re-pointing using mortar that matches the original in material, color and joint profile. In the example above, the historic appearance of the masonry has been maintained. The example on the right shows poor re-pointing that has altered the historic appearance of the building and will accelerate the deterioration of the brick.

Experienced contractors will use low pressure water or steam to clean masonry. Stubborn stains, graffiti, or organic material can be safely removed with new chemical products designed for use on brick or other masonry surfaces. Note: Green, mossy walls may indicate poor air circulation caused by overgrown foundation planting. See Guidelines for Landscaping (page 48).

Never cover brick walls with artificial siding. This is not only a needless expense, overtime any moisture trapped in the walls can rot out interior framing. In extreme cases, it can lead to the collapse of the entire structure.

ARTIFICIAL SIDING

Artificial siding has been used on historic buildings since the late 1920s. According to the 2004 survey of Thompsonville's building stock, asphalt (roll) siding and asbestos shingles, the earliest types, are found on about 15% of the historic buildings in Thompsonville. More potentially destructive products appeared after World War II. Aluminum was introduced in the 1950s and its popularity was soon surpassed by vinyl. Today more than half of the historic buildings in the village are sheathed in aluminum (25%) or vinyl (36%).

ASBESTOS AND ASPHALT

Is your house already covered with asbestos shingles or asphalt siding? These earlier 20th-century materials did not trap moisture, so the original siding may be dry and free from decay. Consider removing these materials to expose the original wood siding underneath. Patch nail holes and if necessary, follow the repair and refinishing steps for wood siding above. Renew the surface with a good paint job. Not only will your house look better with the original siding but you may find original window and door casings and other interesting architectural details underneath. Uncovering and repairing these features will do a great deal towards restoring the historic character and value of your house.

Asbestos shingles need to remain intact so that asbestos fibers can not get airborne. Removal should only be performed by a licensed asbestos abatement contractor."

ALUMINUM AND VINYL SIDINGS

Before you decide on these modern artificial sidings, you should be aware of some of the problems. They are decisions to make about cost, appearance, utility, as well as safety. Are they cost effective? Do they improve the market value of your house? Read on to get answers to these questions and concerns.

PROBLEMS: Aluminum and vinyl siding manufacturers have always claimed their products were maintenance free; today vinyl is also touted as a good way to save energy. Tests carried out by preservation technologists have demonstrated that these claims are not valid.

Despite industry claims, the insulation value of vinyl siding is minimal. Even when backed with a thin layer of insulating foam, or applied over rigid board insulation, the thermal envelope created has about the same "R" value as two to four inches of air space. See Guidelines for Energy Conservation for better ways to save on your heating bill (page 45).

There are maintenance issues to consider. Like any surface exposed to the elements, artificial siding eventually needs repainting or replacement. Heat or even strong sunlight can warp and twist vinyl, which cannot be repaired. Finding

replacement material of the same type and color is almost impossible. Like aluminum, it also can be dented and scratched and has very little insulation value.

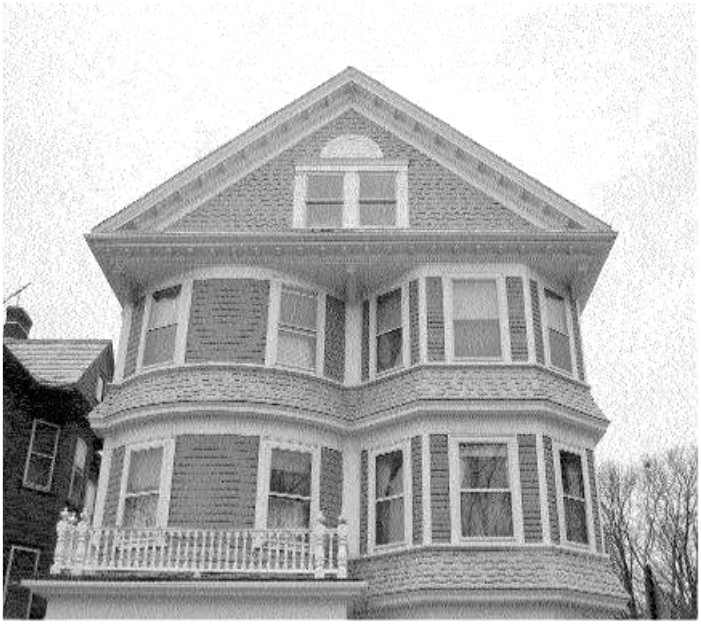
There's a lot more that the siding industry doesn't want you to know—especially the truth about the potentially destructive long-term impact on historic structures. Unlike asphalt and asbestos, which are relatively harmless, vinyl and aluminum act like vapor barriers, trapping moisture in the walls and contributing to structural decay. Weep holes in the siding don't do much to offset this fundamental problem. More importantly, once the siding is in place, wet walls and any evidence of structural damage are hidden from view. For more on this topic, see Guidelines for Controlling Moisture Problems (page 43).

Artificial sidings have safety problems as well. Aluminum siding seems to "heat up" a fire. With higher temperatures, fires burn faster, causing extensive damage before they can be extinguished. Burning vinyl produces toxic fumes, a hazard for occupants as well as firefighters.

And finally, the financial considerations. Vinyl and some the newer untested composites are expensive. Since most real estate professionals agree that any type of artificial siding actually lowers the appraisal and resale value of historic properties, you may never recover your initial investment. There is an even greater loss of value and historic character when siding is not applied correctly.

If you still think that artificial siding is the answer, compare the two houses of the same age and style shown here that illustrate the effects of improperly applied siding on architectural integrity. The one that has retained all of its original architectural features and wood siding is not only a well-preserved historic building, but a livable and valuable home. On the other, careless application of the siding has reduced what once was a 150-year-old Greek Revival house to a bland featureless box, worth thousands of dollars less.

Composite sidings and trim boards are a reality of life in present day building and remodeling. They protect wood frame structures from harsh elements and reduce the cost of maintenance for homeowners. However, the use of composite building materials should not result in the removal or obliteration of important architectural elements, designs and features on the structure.



Building with exterior siding and ornamental trim intact

Building with original siding and ornamental trim covered or removed

GUIDELINES: The correct application of artificial siding can substantially reduce the impact on historic architectural character. All siding applications will comply with the rules set forth below.

- Remove all visibly decayed wood siding down to the frame before applying any new material and repair or replace rotten sheathing and timbers.
- Retain and protect during installation all the special architectural features and details, including but not limited to brackets, roof cornices and returns, window and door surrounds, and all corner, sill, and frieze boards.

- Retain and protect during installation all architectural elements at historic entranceways, including, but not limited to door hoods, columns, posts, pilasters, sidelights, transoms, and entablatures.
- Retain all historic porches and associated architectural features, including, but not limited to columns, posts, spindle courses, scrollwork, brackets, and balustrades.
- Block out window trim boards to maintain the original profile depth (projection out from the original siding).
- Match the exposure (width) of original siding as closely as possible and maintain the horizontal direction.
- Do not install new siding over wall surfaces with shaped shingles or any other special sheathing, such as vertical board-and-batten.
- Do not jump (cover) window and door casings.
- Never cover roof cornices, soffits, and frieze boards with vinyl or metal, as this practice can trap water.

HISTORIC PORCHES

Guidelines: Every effort should be made to retain and preserve historic porches, one of the most important architectural features in Thompsonville. Repair or replace broken and missing elements and refinish. Total replacement is rarely necessary.

Porches, introduced in the 19th century, were popular in both urban and rural areas throughout the historic period. Practically every Victorian house had a porch elaborated with turned posts, balusters, spindles, and brackets. The entryways of the Italianate style were often not a true porch, but a door hood, a small roof supported by elaborate brackets. Classical details and columns characterized the porches and enclosed sun rooms of later Colonial Revival period.

For many simple vernacular houses in Thompsonville, porches often are the only style feature. Among the several kinds of porches are verandas, which usually extend across the façade and may wraparound the corner to a wing. Porticos, are small, roofed porches that shelter just the doorway. Many multi- family houses in Thompsonville have matching entry porches on the facade or side elevations. So-called "double-deckers" have open porches on two levels.

COMMON PROBLEMS: Broken or missing architectural elements, including brackets; rotted steps or flooring; lattice work damaged, or replaced with artificial material; balustrades enclosed, and railing heights not to code. Porch or balustrade was already replaced with construction grade lumber.

SOLUTIONS: Repair or replace only the broken or damaged parts. If only one or two balusters or spindles are missing, new ones can be fabricated from stock finish grade materials to reproduce the size, weight, and form of the original. Lumberyards or building suppliers may have similar or matching turned posts, balusters, and railings in stock. Avoid using two by fours for railings; they have an unfinished appearance and are only suitable for frame construction.

In some architectural styles, porches have half walls instead of balustrades, but covering an existing open balustrade with siding is not appropriate. Remove the siding and repair the balustrade. Total replacement may be necessary if most of the original balustrade has deteriorated and rot is present.

Historic railing heights are usually lower that ones required by modern building codes. Instead of installing an entire new balustrade to meet code, consider a second railing at code height above the original. Pipe railing extensions painted to match the balustrade are an effective and unobtrusive solution to this problem.

Replacement brackets, an architectural detail commonly found at the top of posts or under the eaves of the roof can be fabricated from finish boards of the same thickness. Use one of the original brackets as a template. The same method can be used to make replacements for flat, shaped balusters.

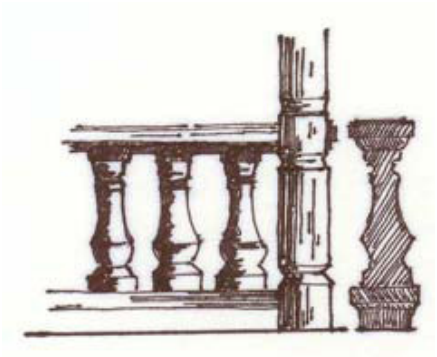
Door hoods and eave brackets can be fashioned from thicker wood stock to generally match the appearance of the original. Plain triangular wood blocks or two by four braces are not acceptable substitutes.

The base of porch posts and columns are the most likely decay sites. Repair or replace damaged sections with new wood. Round or square bases that rest on concrete or masonry, or directly on the porch flooring, can be made from pressure-treated wood, one of the few appropriate uses of this material. Matching replacements for the actual columns and turned posts may also be found at the lumberyard. Posts that are square in section can be replaced by four by fours, usually cased with finish boards. For uncased posts, use top grade material, sawn to size. Reproduce details like chamfered (angled) corners, often used on Italianate-style posts.

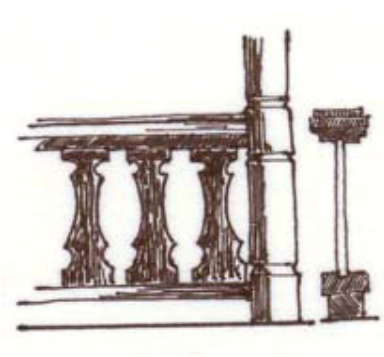
Repair of the skirting, the lattice or similar material that conceals the underside of the porch floor, is rarely possible. Replace with matching material or one of the types of historic lattice work shown here. The diagonal cross-type of lattice commonly sold today is not appropriate Retain and repair the finish boards that conceal the structural framing. Ventilation of this area is important, so avoid enclosing this area with solid panels. Metal or vinyl panels in this location are not appropriate, especially the type with multiple ventilating holes intended for use on roof soffits.

If the porch floor or steps are in poor condition and need replacement, consider one of the new composite decking materials made of recycled wood and synthetic binders A good choice for floors exposed to the weather, these long lasting products require little maintenance.

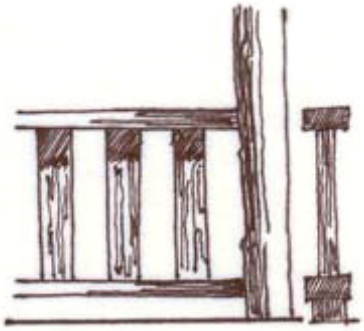
PORCHES



PREFERRED ALTERNATIVE
Use original materials and 3-dimensional balusters and/or new parts duplicating originals.

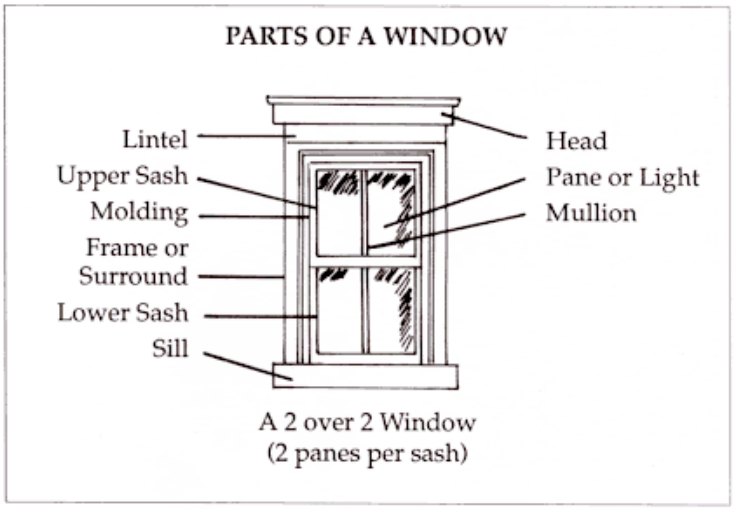


SECOND BEST OPTION
Use stock lumber & moldings to approximate the original railings. 2-dimensional cutout balusters are easier to make than the turned originals.



THIRD ALTERNATIVE
Uses plain lumber in the same proportions and with the same spacing as the original railing the turned originals

HISTORIC WINDOWS



GUIDELINES: Historic window sash and window surrounds and should be retained and repaired. Replacement of severely deteriorated sash and casework should match the design, material, and size of the original features. Blocking-down windows or siding over historic window trim is not appropriate. Reserve modern windows (picture, awning or casements) for rear elevations.

Double-hung, wood sash windows were the most common type of historic window in Thompsonville. Their designs changed over time. Greek Revivals and other early 19th-century houses usually display 6-over-6 sashes (six panes on top and

bottom). After 1850, in the Victorian period, 2-over-2 or 1-over-1 sashes were typical configurations and they may have an arch in the top sash. Windows with 12-pane sashes were a common Colonial Revival pattern in early 1900s. 12-over-1 or 8-over-12 sash windows were also used then. The surrounds of many of these windows have decorative treatments associated with architectural styles of the various periods.

COMMON PROBLEMS: Windows with broken or missing parts; decay, usually confined to the bottom sash; and dried-out or missing putty. Windows sealed shut with paint or failed sash-weight systems. Wrong size and/or type of replacement sash; and window openings blocked-in or covered. Window trim boards and moldings or other architectural details missing and/or covered with artificial siding.

SOLUTIONS: If the existing historic wood sash is in fair condition, repair or replace broken or decayed parts, re-glaze and putty as needed, and refinish. For ease of operation, do not paint sash parts that slide against the jambs. Broken sash cords can be replaced, but retrofitting historic windows with a new type of metal track designed for this purpose is a better, long-term solution.

If window sashes are so deteriorated that repairs are no longer feasible, they should be replaced. Replacement is also a good idea for windows that have been removed or where modern sash was installed in blocked down openings. Custom-made windows may not be necessary. Many sizes of suitable replacement wood windows are manufactured today. Select the type and size that best matches the design of the existing historic sash. Painted wood sash is more authentic, but vinyl clad wood sash is also acceptable. The so-called "true divided light" is the better choice, but a less expensive type of window has a similar historic appearance. Instead of multiple lights, the sash has partial wood muntins on both sides of full size, double-pane or thermal glass. Avoid windows with "snap-in" muntins.

When window casings are jumped (covered) or removed to install artificial siding, a house looks bare and unfinished. Cut back the siding to see the condition of the original casework, and repair as needed. Fabricate new casework from plain boards and stock moldings. Cornices and sills that were sawn off will need total replacement.

Shutters

Should you use shutters on your house? The style of your house will help you determine the answer to this question. Colonial houses had solid wood shutters on the inside of the window. Exterior shutters first appeared in the early 19th century. Then known as "blinds" and fitted with moveable louvers, they were very popular for Greek Revival-style buildings, and continued to be used on some of the later Victorian styles. Since many historic homes built after 1900 were designed to resemble earlier colonial houses, shutters also may be appropriate for these "revivals."

Historic shutters were hinged so they could fold inward and cover the window sash. Although no longer used for this purpose, shutters should appear to work by being the right size for the window. Each shutter should measure the full length of the window and half its width.

Wood is always the best material for shutters and the louvered type is the most appropriate. If vinyl or metal shutters are used, they should resemble the louvered type. Avoid shutters with inappropriate cutout designs.

Preservation of the pattern and rhythm of historic windows is important to the harmony and texture of the building facade and the streetscape. Replacement of six-over-six sashes with one-over-one sashes destroys the scale of the windows (top right). Combining two windows into a single "picture window" or band of windows destroys the rhythm of the facade (bottom left and right). Modifying the alignment of windows and doors in each bay weakens the order of the facade.

HISTORIC DOORS

Historic door styles also changed over time. Although wood paneled doors are the basic type, by the late 1800s, many displayed beveled glass panels. They were set in double or single, round arched openings in the Italianate style. By the early 1900s, a single large pane at the top of the door was a common feature. If your door needs replacement, it may be possible to get an appropriate period door from an architectural salvage business. Some modern stock doors are suitable for older homes. The paneled type is usually the better choice, but a plain solid door is acceptable. Avoid contemporary styles with small square windows.

If you are lucky enough to have an original door in good condition, you may not need storm doors at all. Since older doors were solid and very heavy, they are good insulators and only need weather stripping. If storm or screen doors are absolutely necessary, they should match or complement the design of the panels and rails of the main door and be painted to match. When in doubt, the simplest design will be the best choice.

CONTROLLING MOISTURE PROBLEMS

Guideline: Every effort should be made to maintain a sound weatherproof building, and to take appropriate action to eliminate sources of water infiltration and condensation and to repair any damage to historic material and features.

Water can cause major problems for historic buildings. If not controlled, it can lead to serious structural damage. Making a building weatherproof is relatively straightforward but it is more difficult to identify and correct damage caused by the condensation of water vapor inside the walls.

WATER INFILTRATION

Water can get into all parts of a building. In addition to a wet basement, a perennial problem in old houses, there may be leaks in the roof or from household plumbing. Non-functional gutters and downspouts may allow water to penetrate walls. Water can also infiltrate through cracks or poorly fitted joints. Rising damp from high water tables or poor soil drainage is another area of concern, particularly in houses with low foundations.

WHAT TO LOOK FOR: Wall stains and dirt steaks on the walls from blocked, disconnected, or deteriorated gutters and downspouts; openings in siding, trim boards, and cornices, especially at corners of soffit covers; water stains on the inside of roof boards; and peeling paint near the base of the wall. Cracks or crumbling mortar in masonry buildings or any building with a masonry foundation. Water stains and/or mold on inside walls and ceilings, which also may be signs of plumbing leaks.

If not corrected, long-term leaks can lead to new mold strains that are actually dangerous to your health.

So far, these new mycotoxins seem to be confined to recent construction. They thrive on newer materials such as sheet rock; historic houses with plastered walls appear to be less vulnerable.

SOLUTIONS: Weatherproofing begins with the roof (discussed in some detail below), but every homeowner also should take additional steps to prevent water damage. Install and maintain functioning gutters and downspouts and divert runoff away from the building. Remove all metal covers on cornices and soffits and frieze boards to keep water from collecting, and repair existing damage. Repair and caulk open joints and replace cracked boards. Caulk around window and doors casings, especially above cornices. The ground around the foundation should be graded to slope away from the house. Severe reoccurring problems, like flooded cellars, may indicate the need for a complete perimeter drain system with perforated pipe laid over gravel.

Roofing:

A good sound roof protects your house from the elements. Some historic houses in Thompsonville still display original slate or metal shingles, the most common

roofing materials in the 19th century. Most roofs today, however, are sheathed with asphalt shingles, an industry standard ever since about 1910. The first asphalt shingles were made of tar-coated felt or wood fibers and had a relatively limited effective life. Modern asphalt shingles are much improved, but they don't last forever. At some point almost every homeowner with an asphalt shingled roof is faced with re-shingling.

COMMON PROBLEMS: Cracked, broken, or missing slates; dark patches on asphalt shingles (surface granules are worn away); and missing, curled, or lifted shingles; and staining on the underside of roof boards, a sure sign of water penetration.

SOLUTIONS: You don't have to wait for a rainstorm to locate leaks. They are easily spotted on a sunny day from inside a dark attic. Light will stream everywhere there is an opening. If you can see daylight around your chimney or waste vent pipe, then you know the flashing needs to be replaced

Slate, the most durable type of roofing material, is the best maintenance bargain. With repairs and the replacement of missing or broken slates, your roof can last another 100 years. Replacing a slate roof with asphalt shingles is an unnecessary expense. In fact, the price of repairs is only one-third the cost of installing asphalt shingles.

Total replacement is the only solution for a severely deteriorated asphalt shingled roof. Since this is a major long-term capital investment, choose the best quality shingles you can afford. The least expensive asphalt shingles, actually tar-coated cellulose or fiberglass, are guaranteed from 15 to 30 years. So-called architectural grades cost a lot more (up to 5 times as much) but they may last as much as 40 years. Usually composed of several layers and backed with fiberglass webbing, these quality shingles are more wind resistant as well as less flammable, and often surface-treated to resist mold or ultraviolet damage. Keep in mind, that although manufacturers give long term guarantees on their best grades, extended warranties are prorated over the stated life of the product.

You can add a new layer of shingles over the existing sheathing, but more than two layers may exceed the structural capacity of the building. If you already have several shingle layers in place, have them stripped completely off, right down to the roof boards. Replace any rotten or damaged boards and install new shingles over standard roofing paper.

Multiple layers of roof shingles can exceed structural load-bearing limits.

Now is also the time to repair the soffits, eave brackets, and fascia. Metal or vinyl covers, which often collect water, should be removed completely. If several brackets are missing or badly deteriorated, fabricate replacements (see pages 38-41).

Hiring a roofing contractor is recommended. Repairing a slate roof or installing asphalt shingles is not a do-it-yourself project. In fact, improper installation of

asphalt shingles can void the manufacturer's warranty. When you hire a contractor for this job or any other any home improvement work, make sure the company is fully insured and state-licensed. Get several bids, and always check references.

CONDENSATION

Condensation, the process of water vapor returning to a liquid state, is a relatively new problem for historic buildings. In the old days before indoor plumbing, the only sources of moisture in the air were from cooking or heating with wood or coal fires (the latter a byproduct of combustion). Climate control was primitive: houses were cold and drafty in winter and in the summer people just opened their windows for ventilation. As a result, the relatively small amount of water vapor generated escaped through the walls without condensing.

Living conditions today are quite different. Because modern households generate gallons of water vapor every day and have better climate control systems, more water condenses and collects at the bottom of wall cavities. If left unchecked, siding and even framing timbers can decay. By the time warning signs appear, there may already be extensive structural damage

WARNING SIGNS: Exterior walls feel wet to the touch, especially near the sills, the presence of mildew and/or blistering, peeling or flaking of the paint film in the same areas. Note: These conditions may also be signs of water infiltration as discussed above. Remove the siding to open up the walls to inspect the timbers underneath for rot ands insect infestation. Repair or replace damaged wood.

PREVENTION: To control the moisture content inside your house, install fans in bathrooms, laundries, and kitchens and vent them to the outside. Consider special vapor barrier paint in the rooms where moisture accumulates. Dehumidifiers are recommended in the summertime, especially in damp basements. Be sure the attic has louvered vents in the gable peaks, and install additional exterior air vents at intervals along the top of outside walls.

For the most recent publication on diagnosing and solving moisture problems, see *Preservation Brief 39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings,* cited under Recommended Reading.

ENERGY CONSERVATION

Guideline: Appropriate methods and materials that save energy in historic buildings limit the damage to historic fabric.

Saving energy is a major concern for many homeowners today and should be part of any rehabilitation plan. Since 75 percent of your heat loss is through the roof, begin by insulating the attic. Install at least six inches of insulation under the roof or between floor joists. Inexpensive simple measures such as re-caulking around doors and windows can provide additional savings. Add weather stripping to all outside doors. More information on weather stripping in historic buildings is available at the Enfield Planning Department.

Consider installing new storm doors and windows. Your selection should be based on color and design. Factory applied colors may be right for your house, or you can buy an unfinished aluminum door or window, prime it with zinc chromate and paint it yourself. Choose a simple door design that matches the placement of horizontal elements in the original door.

What about the walls? There's really no completely effective way to properly insulate the walls in a historic building. To do the job right you need a vapor barrier on the warm side of the wall. Standard batt insulation with vapor barriers cannot be installed in walls without gutting the interior, which destroys plaster, woodwork, and other original historic fabric.

Some types of insulation that can be introduced into wall cavities from the outside have their own problems; for example, blown-in cellulose often settles to the base of the wall. The chemicals in the foam types can be destructive of wood fibers. In fact, in the absence of vapor barriers, both these types of insulation can contribute to condensation problems in the wall.

A better choice is spun fiberglass. This newer product, which can "breathe," is less likely to trap moisture or settle in wall cavities. Installation by a contractor is expensive, but you can save money by renting the equipment to do the job. Typically a contractor will bore a series of holes (one for each stud cavity) right through the existing siding. Although these holes are plugged when the job is done, it takes a lot of work to restore the original surface of the siding. There is a better way. Remove one or two rows of siding along the top and middle of the wall, so entry holes can be cut through just the sheathing underneath. Complete the job by replacing the original siding.

The technology of alternative building materials is constantly changing in response to modern day concerns over energy conservation and environmental stewardship. While traditional building materials and methods are usually preferred for Historic Preservation purposes, there are modern materials and products that do provide legitimate alternatives which are cost and energy efficient, while still meeting the objectives of maintaining historical designs and attributes. The utilization of modern building materials and methods should be embraced where practical, and rejected where it is not.

The full story of energy conservation in historic buildings is complex and beyond the scope of this guide. For more information, please see *Preservation Brief 3: Conserving Energy in Historic Buildings.* The Enfield Planning Department is also available to answer questions.

NEW CONSTRUCTION IN HISTORIC CONTEXTS

Respect for the architectural character and rhythms of the historic streetscape are the foundation of the guidelines for new construction in Thompsonville. They establish general architectural design parameters for all types of new construction in historic contexts. Primarily developed to provide direction to architects and builders, they also may benefit individual historic property owners.

ADDITIONS AND EXTERIOR ALTERATIONS

Guidelines: Compatible new additions and exterior alterations to historic buildings may reflect but not duplicate the design of the original structure or convey a false historic appearance. Appropriate additions should clearly read as new construction and conform to the following design criteria:

- Be restricted to less visible rear or side elevations.
- Scaled in proportion to existing height and massing, but not exceed 30 percent of the existing building footprint.
- Employ similar materials and/or simplified versions of existing historic architectural elements.

NEW INFILL CONSTRUCTION

Guideline: New residential construction should reflect the patterns and rhythms of the historic streetscape. Contemporary designs or simplified versions of historic domestic styles are appropriate when they meet the following criteria:

- Maintain the historic setback from the street.
- Conform to the prevailing scale, form, height, and massing of the streetscape.
- May include architectural elements common to the streetscape, such as roof and window types, and employ similar materials.

An addition to a historic building should be a secondary form that preserves the form of the historic building. A proposed addition should be no larger than two-thirds the street frontage of an existing building.

Guideline: New commercial construction should conform to the prevailing height and scale of the existing historic streetscape and meet the following criteria:

- Maintain existing cornice (roof and storefront) lines.
- Employ appropriate materials that are compatible with adjacent buildings.
- Avoid materials and features that convey a residential appearance.
- Facade design may incorporate simplified versions of historic architectural elements from adjoining historic buildings, including but not limited to cornice design, storefront configuration, and window and door types.

LANDSCAPING

Now that you finished restoring the outside of your home, it is the time to turn your attention to the yard. Appropriate landscaping can do much to improve the appearance of your property. Strictly speaking, foundation planting was unheard of before about 1850. Later in the century shrubs and other plants were used to hide the higher, exposed foundation of Victorian house styles. Today, simple low foundation plantings seem to enhance houses of any style. Hedges set along property lines and simple fences also are appropriate.

COMMON PROBLEMS: One of the more common landscape problems for older homes is overgrown shrubs that hide or brush against the house. Nearby house walls may be damp and/or have a greenish color from algae, moss or other organic material. Existing fences may be too tall and/or the wrong type for residential use. Cars may be parked on front lawns and other unpaved areas.

SOLUTIONS: Large shrubs (or trees) too close to a house often interfere with air circulation. The options are pruning them back to size or complete removal. Pruning is not the answer unless mature shrubs have been trimmed on a regular basis. Now is the time to consider some new foundation planting; local nurseries will be glad to advise you.

Many people have fenced-in yards for privacy and protection. Many historically appropriate residential kinds are available. Picket fences are always appropriate with earlier nineteenth-century styles and also go well with Colonial Revival-style houses. Modern versions of "wrought iron" are suitable for the Victorian styles. Prefabricated panels of all these types are available at your home improvement or building supply store.

Modern stockade, rail and industrial chain-link fencing are not appropriate in a historic residential setting. Reserve them for the side or rear yards where they will be less visible from the street. If your property already has a chain-link fence along the street side, consider planting hedges to conceal it.

Parking is a major issue in Thompsonville, especially for multifamily residences. Parking cars on the grass or graveled areas contributes to the pollution of the watershed, a particular environmental concern in a riverside community. If your property does not have enough paved parking space, off-site parking should be arranged. Town-owned parking lots are available in most neighborhoods.

Groundcovers and Window Boxes

Grass has always been a popular groundcover. However, it needs to be mowed and fertilized regularly. In the small front yards of Thompsonville, low plantings of myrtle, pachysandra, and ivy may be a better choice. Once started, they need little care and seem to thrive on neglect. Where yard space is limited, a window box is a simple effective way to add color or greenery to your house.

Architectural Glossary

Baluster…A closely spaced vertical element for a porch or stair railing.

Bay…External divisions of a building based on the location of windows and doors.

Bay Window…A projecting window extending from the foundation up one or more levels, forming an extension to the interior floor spaces. Curved bay windows are called bow fronts.

Bargeboard… Decorative finish board along the rake edge of a roof, often elaborated with moldings, panels, and/or scroll-sawn details.

Bond… The pattern for setting bricks, for example: common bond has staggered rows of bricks, all laid lengthwise. Variations include alternating rows of header bricks, a pattern called English bond.

Bracket…A small wood projection, usually sawn or carved. Supports, or appears to support projecting features, such as cornices or eaves. Often used to elaborate the top of porch posts.

Clapboards…Narrow, horizontal, overlapping wooden boards, generally 4" – 6" wide, used for siding wood-frame buildings.

Classical Orders…In classical architecture an order consists of a **Column** or shaft (with or without a base), its **Capital** or head, and an **Entablature**, The most common orders ones established by the ancient Greeks – the Doric, Ionic and Corinthian, were modified by the Romans.

Column…A vertical round or tapered shaft, commonly used to support a porch roof (See classical orders).

C**orner Board**…A vertical trim board at the corner of a wood-frame building.

Cornice…Any projecting ornamental molding used to define or cap an architectural feature.

Dentil…Small square blocks generally used in a row to ornament a cornice.

Dormer…A roofed window that projects from a sloped roof.

Eave … The projecting overhang of a roof.

Entablature…The horizontal area above columns or pilasters, which includes the architrave, frieze, and cornice (see Classical Orders)

Façade…The front face or elevation of a building

Fanlight... A semi-circular or elliptical window used in gable peaks and as a transom over doors. Also see Palladian window.

Fascia…A flat board covering underside of a soffit at the eaves of a roof.

Fenestration…The arrangement of openings for windows and doors.

Finial...A decorative wood or metal ornament applied to the top of a pointed roof or other architectural feature.

Frieze...A flat trim board usually found under the eaves or over a door. May be part of a full **Entablature.**

Hood…A small roof over a door or window, usually supported by brackets.

Gable...The triangular portion of a wall defined by the sloping edges of a roof

Gambrel Roof...A ridged roof having two slopes on each side where the lower is steeper than the upper.

Lights…Glass panes, usually in a window (see Window Sash)

Lintel…A horizontal beam or other supporting member over wall openings for windows and doors.

Mansard Roof...A roof having two slopes on all four sides associated with the Second Empire style. The nearly vertical lower slope may be curved.

Molding...A decorative band or strip of wood with a curved profile. Generally used on cornices and as trim around window and door openings.

Muntin…The cross pieces between the panes of a window sash.

Newel… A post supporting one end of a handrail, usually at the top and bottom of a flight of stairs.

Palladian Window… A three-part window with a taller center section usually topped with a fanlight and flanked by standard double-hung sash.

Pediment… The triangular space formed by the two slopes of a gable roof, framed by projecting cornices. Also, the triangular cap used as decoration over a door or a window.

Pilaster…A flat-faced or half-round column which projects slightly from the surrounding wall.

Portico… A roofed entrance, usually with columns or posts.

Quoin or Quoining… Dressed stones at the corner of a masonry building; or wood blocks on wood or stucco buildings.

Sash… The operable part of a window. Glazing may consist of one large pane or it may be divided into smaller lights by **Muntins**.

Sill…The lower horizontal part of a door or window frame or the horizontal beam that rests on the foundation wall.

Spindles…Short turned pieces of wood used in decorative sections (spindle course) under the eaves of porch roofs.

Transom…A fixed or moveable horizontal window over a door or window.

Watertable… Projecting section at the base of wood or stone walls designed to deflect water from the foundation.